

WHAT IS CLAIMED IS:

1. A system for alerting an aircrew of a dangerous situation occurring on an aircraft, the system comprising:

a plurality of fobs, each fob being carried by an authorized person located on the aircraft, the fob capable of transmitting a signal; and

a cockpit display unit (CDU) for receiving signals sent from the transmitting fob, said CDU located within a cockpit of the aircraft;

whereby one of the authorized persons carrying the fob detects a dangerous situation and sends a signal from the fob to said CDU, said CDU providing an indicator to a cockpit crew and an alert signal to the plurality of fobs of the dangerous situation.

2. The system for alerting an aircrew of claim 1 further comprising an antenna sending unit (ASU) located within a cabin of the aircraft, said ASU capable of communicating with each fob, said ASU forwarding any transmitted signals to the CDU.

3. The system for alerting an aircrew of claim 1 wherein each fob is capable of transmitting a plurality of specific codes, each code correlating to a specific type of dangerous situation occurring on the aircraft.

4. The system for alerting an aircrew of claim 1 further comprising means for relaying the signal sent from the transmitting fob to ground-based personnel.

5. The system for alerting an aircrew of claim 4 wherein said means for relaying the signal includes emitting a transponder code from a transponder installed on the aircraft.

6. The system for alerting an aircrew of claim 4 wherein said means for relaying the signal includes sending an ACARS message from an ACARS unit installed on the aircraft to ground-based personnel.

7. The system for alerting an aircrew of claim 1 wherein said CDU includes means for detecting an attempt to jam a frequency used by the transmitting fob to send the signal to the CDU.

8. The system for alerting an aircrew of claim 1 wherein each fob includes a staging means providing multiple retransmission of the signal in a randomly timed spacing pattern.

9. The system for alerting an aircrew of claim 1 wherein the each fob, upon receipt of the alert signal from the CDU, provides an alert to the authorized persons.

10. The system for alerting an aircrew of claim 9 wherein the alert is a vibrating alert from a vibrating mechanism embedded within the fob.

11. A system for alerting an aircrew of a dangerous situation created by a passenger within a cabin area of an aircraft, the system comprising:

a plurality of fobs, each fob being carried by an authorized person located on the aircraft, the fob capable of transmitting a plurality of selectable signals, each selectable signal providing specific information on the dangerous situation within the cabin area; and

a cockpit display unit (CDU) for receiving signals sent from the transmitting fob, said CDU located within a cockpit of the aircraft;

whereby one of the authorized persons carrying the fob detects a dangerous situation created by a passenger within the cabin area, selects a selectable signal from the plurality of selectable signals and sends the selected signal from the fob to said CDU, said CDU providing an indicator to a cockpit crew of the dangerous situation and an alert signal to each fob, each fob providing an alert to each authorized person carrying the fob.

12. The system for alerting an aircrew of claim 11 wherein the CDU sends a test signal to each fob.

13. The system for alerting an aircrew of claim 12 wherein a fob provides an alert when the test signal is not received by the fob after a predetermined time interval.

14. The system for alerting an aircrew of claim 13 wherein the test signal has a signal strength providing reception by each fob for a specified distance and wherein when the fob is carried beyond the specified distance, the alert provides an out-of-range indicator to the authorized person carrying the fob.

15. The system for alerting an aircrew of claim 12 wherein the fob returns a status signal to the CDU providing information on the status of the fob.

16. A method of alerting an aircrew located in an aircraft of a dangerous activity on the aircraft, said method comprising the steps of:

initializing a plurality of fobs to allow a cockpit display unit (CDU) located within a cockpit of the aircraft to recognize any signals transmitted by each initialized fob;

carrying at least one fob by a flight crew member during flight of the aircraft;

transmitting a signal from the fob to the CDU, said signal being sent by the flight crew member when detecting a dangerous activity occurring aboard the aircraft;

displaying an indication on the CDU to the cockpit crew that a signal was sent from the fob;

broadcasting an alert signal to all the fobs to indicate that a dangerous activity has occurred aboard the aircraft.

17. The method of alerting an aircrew of claim 16 wherein the step of transmitting a signal to the CDU includes transmitting a coded signal associated with a specific condition occurring during the detected dangerous activity.

18. The method of alerting an aircrew of claim 16 wherein the step of transmitting a signal to the CDU includes the steps of:

transmitting a signal from the fob to an antenna sending unit (ASU) located on the aircraft; and
relaying, by the ASU, the signal to the CDU.

19. The method of alerting an aircrew of claim 18 further comprising the steps of:

sending a test signal from the ASU to each fob to query the status of the fobs;

responding by each fob with a status of the fob to the ASU.

20. The method of alerting an aircrew of claim 18 further comprising the steps of:

sending a test signal from the ASU to each fob to query the status of the fobs;

emitting an alert by each fob after exceeding a specified time period without receiving a test signal.